

IN THE CLAIMS:

The status of each claim that has been introduced in the above-referenced application is provided in the ensuing listing of the claims. This claims listing replaces all prior claims listings.

1. (Currently Amended) A dry etchant, ~~comprising~~ consisting essentially of:
a first component with the general formula $C_2H_xF_y$, where x is an integer from 3 to 5, inclusive, y
is an integer from 1 to 3, inclusive, and $x + y = 6$; and
a second component consisting of at least one fluorocarbon,
said dry etchant being formulated to etch doped silicon dioxide with selectivity over at least
undoped silicon dioxide.

2. (Original) The dry etchant of claim 1, also being formulated to etch doped silicon
dioxide with selectivity over silicon nitride.

3. (Canceled without prejudice or disclaimer)

4. (Currently Amended) The dry etchant of claim 3 1, wherein said first component
is a primary etchant.

5. (Currently Amended) The dry etchant of claim 4, ~~further comprising~~ wherein said
second component is an additive.

6. (Canceled without prejudice or disclaimer)

7. (Currently Amended) The dry etchant of claim 5 1, wherein said ~~additive~~
~~comprises a~~ second component consists of at least one fluorocarbon having at least as many
hydrogen atoms as fluorine atoms.

8. (Currently Amended) The dry etchant of claim 7, wherein said at least one fluorocarbon comprises at least one of CH_2F_2 and CH_3F .
9. (Currently Amended) The dry etchant of claim 5 1, wherein said ~~additive~~ fluorocarbon comprises at least one of CF_4 and CHF_3 .
10. (Currently Amended) The dry etchant of claim 4 5, wherein said additive increases a rate with which said dry etchant etches doped silicon dioxide over a rate at which said first component alone etches doped silicon dioxide.
11. (Original) The dry etchant of claim 10, wherein said additive comprises at least one of CF_4 and CHF_3 .
12. (Currently Amended) The dry etchant of claim 4 5, wherein said additive increases a selectivity with which said ~~dry etchant~~ first component etches doped silicon oxide over at least undoped silicon dioxide over said selectivity of said first component alone.
13. (Original) The dry etchant of claim 12, wherein said additive comprises at least one of CH_2F_2 and CH_3F .
14. (Currently Amended) The dry etchant of claim 4 5, wherein said additive increases a selectivity of said ~~dry etchant~~ first component for one type of doped silicon dioxide over another type of doped silicon dioxide over said selectivity of said first component alone.
15. (Currently Amended) The dry etchant of claim 3 1, wherein said first component comprises an additive and said second component comprises a ~~for use with another,~~ primary etchant.

16. (Original) The dry etchant of claim 15, wherein said primary etchant comprises at least one of CF_4 and CHF_3 .

17. (Currently Amended) The dry etchant of claim 15, wherein ~~said~~ a combination of said first component and said primary etchant etches doped silicon dioxide with greater selectivity over at least undoped silicon dioxide than a selectivity of said primary etchant alone.

18. (Currently Amended) The dry etchant of claim 15, wherein ~~said~~ a combination of said first component and said primary etchant etches doped silicon dioxide at a substantially ~~normal~~ a same rate as an etchant that includes said primary etchant but not said first component etches doped silicon dioxide.

19. (Currently Twice Amended) The dry etchant of claim ~~3~~ 1, wherein relative concentrations of said first component and said ~~primary etchant in said combination~~ second component are tailored to provide for at least one of a particular etch selectivity of doped silicon dioxide over undoped silicon dioxide, a particular etch selectivity of doped silicon dioxide over silicon nitride, and a particular etch rate of doped silicon dioxide.

20. (Currently Amended) A dry etchant consisting essentially of at least one fluorocarbon, said at least one fluorocarbon comprising a component with the general formula $\text{C}_2\text{H}_x\text{F}_y$, where x is an integer from 3 to 5, inclusive, y is an integer from 1 to 3, inclusive, and $x + y = 6$, said dry etchant being formulated to etch doped silicon dioxide at a faster rate than at least undoped silicon dioxide.

21. (Original) The dry etchant of claim 20, also being formulated to etch doped silicon dioxide at a faster rate than silicon nitride.

22. (Original) The dry etchant of claim 20, including a combination of components.

23. (Original) The dry etchant of claim 22, wherein said component is a primary etchant.
24. (Original) The dry etchant of claim 23, further comprising an additive.
25. (Original) The dry etchant of claim 24, wherein said additive comprises a halogenated carbon dry etchant material.
26. (Original) The dry etchant of claim 24, wherein said additive comprises a fluorocarbon having at least as many hydrogen atoms as fluorine atoms.
27. (Original) The dry etchant of claim 26, wherein said fluorocarbon comprises at least one of CH_2F_2 and CH_3F .
28. (Original) The dry etchant of claim 24, wherein said additive comprises at least one of CF_4 and CHF_3 .
29. (Original) The dry etchant of claim 23, wherein said additive increases a rate with which said dry etchant etches doped silicon dioxide over a rate at which said component alone etches doped silicon dioxide.
30. (Original) The dry etchant of claim 29, wherein said additive comprises at least one of CF_4 and CHF_3 .
31. (Original) The dry etchant of claim 23, wherein said additive increases a selectivity with which said dry etchant etches doped silicon oxide over at least undoped silicon dioxide over said selectivity of said component alone.

32. (Original) The dry etchant of claim 31, wherein said additive comprises at least one of CH_2F_2 and CH_3F .

33. (Original) The dry etchant of claim 23, wherein said additive increases a selectivity of said dry etchant for one type of doped silicon dioxide over another type of silicon dioxide over said selectivity of said component alone.

34. (Original) The dry etchant of claim 22, wherein said component comprises an additive for use with another, primary etchant.

35. (Original) The dry etchant of claim 34, wherein said primary etchant comprises at least one of CF_4 and CHF_3 .

36. (Original) The dry etchant of claim 34, wherein said combination of said component and said primary etchant etches doped silicon dioxide with greater selectivity over at least undoped silicon dioxide than a selectivity of said primary etchant alone.

37. (Original) The dry etchant of claim 34, wherein said combination of said component and said primary etchant etches doped silicon dioxide at a substantially normal rate.

38. (Previously Amended Twice) The dry etchant of claim 22, wherein relative concentrations of said component and said primary etchant in said combination are tailored to provide for at least one of a particular etch selectivity of doped silicon dioxide over undoped silicon dioxide, a particular etch selectivity of doped silicon dioxide over silicon nitride, and a particular etch rate of doped silicon dioxide.

(Please add the following new claims:)

-- 39. (New) The dry etchant of claim 1, wherein said first component comprises up to about 65% of a total gas flow of the dry etchant.

40. (New) The dry etchant of claim 1, wherein said first component comprises up to about 40% of a total gas flow of the dry etchant.

41. (New) The dry etchant of claim 40, wherein said second component comprises up to about 60% of said total gas flow.

42. (New) The dry etchant of claim 1, further including at least one carrier gas.

43. (New) The dry etchant of claim 20, wherein said component comprises up to about 65% of a total gas flow of the dry etchant.

44. (New) The dry etchant of claim 20, wherein said component comprises up to about 40% of a total gas flow of the dry etchant.

45. (New) The dry etchant of claim 43, wherein at least one other component comprises up to about 60% of said total gas flow.

46. (New) The dry etchant of claim 20, further including at least one carrier gas.--